

REMARKS

Claims 36-59 were pending in the instant application as of the issuance of the Office Action mailed on February 23, 2006. According to the foregoing amendments, claims 36, 38-40 and 49-52 have been amended and claim 37 has been cancelled, without prejudice. Accordingly, after the amendments presented herein have been entered, claims 36 and 38-59 will remain pending.

Support for the amendments to the claims may be found throughout the specification, for example, at page 10, lines 12-26 and in Table 9 starting at page 49 of the specification, and in the claims as originally filed. No new matter is introduced by these amendments.

Restriction Requirement

Claims 36-59 are subject to a restriction requirement under 35 U.S.C. 121 and 372. The Examiner has required restriction between the following inventions in the above-identified application:

Group I: Claims 36-59, drawn to the special technical feature of a method for designing a drug involving molecular modeling;

Group II: Claims 36-59, drawn to the special technical feature of a method for designing a drug involving direct structure based design; and

Group III: Claims 36-59, drawn to the special technical feature of a method for designing a drug involving combinatorial chemistry.

Applicants respectfully traverse the foregoing Restriction Requirement and submit that the requirement is improper. However, in order to be considered responsive to the instant Office Action, Applicants hereby elect Group II (claims 36-59 drawn to the special technical feature of a method for designing a drug involving direct structure based design), ***with traverse***.

Applicants traverse the restriction requirement to the extent that Groups I-III should be reformed as a single group containing claims 36 and 38-59 directed to each of molecular modeling, direct structure based design and combinatorial chemistry techniques.

In requiring restriction, the Examiner states

the technical feature linking the inventions of Groups I-III is a molecular structure. The inventions listed as Groups I-III do not relate to a single general inventive concept under

PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical feature for the following reason(s):

According to PTC [sic] Rule 13.2, unity of invention exists only where the shared same or corresponding technical feature is a contribution over the prior art. Claim 36 is not limited to the use of a molecular structure from an LTA₄ hydrolase protein having the structural coordinates as set forth in Table 9 in practicing the claimed methods. Instead, claim 36 has been interpreted in accordance to M.P.E.P. § 2111 as encompassing a method of using any molecular structure. Thus, claim 36 encompasses a method to design a drug utilizing any molecular structure, *i.e.*, 'functionally equivalent part, derivative or conformational analogue thereof', by molecular modeling. Since Kuntz *et al.*... discloses computer strategies for the design of novel inhibitors, the technical feature for Groups I-III does make it [sic] a contribution over the prior art. (Office Action, page 3)

Applicants submit that the present invention is based, in part, on the elucidation of the three dimensional structure of the LTA₄ hydrolase protein crystal, exclusively defined by the present invention. Accordingly, the special technical feature of the present invention is the molecular structure of an LTA₄ hydrolase protein, or a functionally equivalent part thereof capable of exhibiting enzymatic activity in the leukotriene cascade, as set forth in Table 9. Indeed, each of the claims, as amended, are directed specifically to the molecular structure of this LTA₄ hydrolase protein or a functionally equivalent part thereof capable of exhibiting enzymatic activity in the leukotriene cascade, and not to *any* molecular structure, as asserted by the Examiner. As such, the pending claims represent a contribution over the prior art. Accordingly, Applicants submit that as the special technical feature of the invention lies in a specifically defined molecular structure, the examination of the claims with respect to each of the drug design techniques would be considered proper and would not place a serious burden on the Examiner, in accordance with M.P.E.P. § 803.

For at least each of the foregoing reasons, Applicants respectfully request that the restriction requirement be withdrawn, and that all of the claims presently pending in this application, *i.e.*, claims 36 and 38-59, be examined. Applicants reserve the right to traverse the restriction between the non-elected groups in this or a separate application.

SUMMARY

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the present filing to Deposit Account No. 12-0080, under Order No. PVZ-006US from which the undersigned is authorized to draw.

Applicants respectfully submit that the above-identified application is in condition for allowance. If a telephone conversation with Applicants' attorney would expedite prosecution of the above-identified application, the Examiner is urged to call Applicants' Attorney at (617) 227-7400.

Dated: April 24, 2006

Respectfully submitted,

By 

Danielle L. Herritt, Registration No.: 43,670 *for*
Elizabeth A. Hanley, Registration No.: 33,505
LAHIVE & COCKFIELD, LLP
28 State Street
Boston, Massachusetts 02109
(617) 227-7400
(617) 742-4214 (Fax)
Attorney/Agent For Applicant